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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/643,097	08/18/2003	Warran B. Lineton	71024-023	3347
59582 7590 03/12/2007 DICKINSON WRIGHT PLLC 38525 WOODWARD AVENUE SUITE 2000 BLOOMFIELD HILLS, MI 48304-2970			EXAMINER DANIELS, MATTHEW J	
			ART UNIT	PAPER NUMBER
			1732	
			MAIL DATE	DELIVERY MODE
			03/12/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

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**Advisory Action  
Before the Filing of an Appeal Brief**

Application No.

10/643,097

Applicant(s)

LINETON, WARRAN B.

Examiner

Matthew J. Daniels

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**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 20 February 2007 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☐ The period for reply expires \_\_\_\_\_ months from the mailing date of the final rejection.  
b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**NOTICE OF APPEAL**

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

**AMENDMENTS**

3. ☒ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
(a) ☒ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☒ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: See Continuation Sheet. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☒ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
The status of the claim(s) is (or will be) as follows:  
Claim(s) allowed: \_\_\_\_\_.  
Claim(s) objected to: \_\_\_\_\_.  
Claim(s) rejected: 1-9.  
Claim(s) withdrawn from consideration: \_\_\_\_\_.

**AFFIDAVIT OR OTHER EVIDENCE**

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

**REQUEST FOR RECONSIDERATION/OTHER**

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
See the enclosed response to arguments.  
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). \_\_\_\_\_  
13. ☐ Other: \_\_\_\_\_.

Continuation of 3. NOTE: The claim amendments would require at least further consideration, and may require further search.

***Response to Arguments***

1. Applicant's arguments filed 20 February 2007 have been fully considered but they are not persuasive. The arguments appear to be on the following grounds:

a) Claim 1, as amended, calls for a mixture of PTFE and susceptor, feeding into a compaction zone, shaping, providing a continuous flow, sintering by application of wave energy and drawing a vacuum on the mixture within the heating zone.

b) Polyethylene (PE) and Polytetrafluoroethylene (PTFE) have loss indexes which are different by a factor of two. Thus, the materials are not equivalent.

c) Claim 1 has been amended to recite the limitations of Claim 2.

d) The '192 patent teaches processing articles in a vacuum compression mold of the desired shape under vacuum and then, upon removal from the hot mold, the molded article can be cooled and sintered.

e) Applicant's traverse the rejections over Adams because Polyethylene (PE) and Polytetrafluoroethylene (PTFE) have loss indexes which are different by a factor of two. Thus, the materials are not equivalent. PTFE has by far the lowest loss index, making it the most improbably material listed to be dielectrically heated.

2. These arguments are not persuasive for the following reasons:

a, c) The arguments are drawn to claim amendments which are not being entered. To the extent that the limitations of Claim 2 are argued, see (d) below.

b, e) The Examiner maintains the position set forth in the rejection, namely that PE and PTFE are equivalent alternative materials with respect to their capacity for radio-frequency heating. While

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Applicant's remarks point to the factor of two (or ½) difference between the loss indexes of these materials, the remarks do not appear to consider that the materials are both recognized to have extremely small loss indexes compared to other polymeric materials, such as urea-formaldehyde and epoxy. One of ordinary skill in the art at the time of the invention would have found it obvious to apply the process of Thorsud to other compositions having a similar loss index in order to provide a similar heating effect. In particular, Thorsud teaches that "Broadly speaking, the inorganic RF sensitizers of the instant invention are useful in essentially any composition wherein the inorganic compound is not materially detrimental and which is subjected to RF radiation for heating purposes." (emphasis added, 4:62-66). The Examiner asserts that the '192 patent is non-limiting in its application, and its method is suggested for any material where the inorganic material is not materially detrimental.

d) To the extent that the arguments are directed at Claim 2, the Examiner respectfully disagrees with the Applicant's position regarding the teachings of the '192 patent. In particular, see Fig. 1, which shows "HOT ISOSTATIC MOLDING CYCLE WITH VACUUM" performed at temperatures of between 350 C and 400 C. Additionally, see column 5, lines 2-30. In particular, the '192 patent teaches that vacuum can be drawn while compressing the material at a temperature of 380 C to produce a molded article (5:10-20). Additionally, the '192 patent teaches, notably, that a temperature of only 327 C is needed to accomplish sintering (5:37-39). Thus, the '192 patent teaches application of vacuum on a mixture within the heating zone to extract air from the mixture at a temperature which inherently produces sintering (inherent in drawing a vacuum, concurrently compressing at high pressure and heating at 350-400 C, see 5:7-39).

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***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew J. Daniels whose telephone number is (571) 272-2450.

The examiner can normally be reached on Monday - Friday, 8:00 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson can be reached on (571) 272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MJD 3/6/07



CHRISTINA JOHNSON  
SUPERVISORY PATENT EXAMINER  
3/6/07